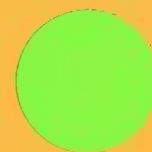


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Health Care Financing Notes

Medicare: Use of
Long-stay Hospitals, 1977



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Health Care Financing Notes

Health Care Financing Notes are published periodically by the Health Care Financing Administration's Office of Research, Demonstrations, and Statistics.

The Health Care Financing Administration was established in March 1977 to combine HEW's health financing and quality assurance programs into a single agency. HCFA is responsible for the operation of the Medicare and Medicaid programs, the PSRO program, Federal survey and certification efforts, and a variety of health care quality assurance activities.

The mission of the Health Care Financing Administration is to promote the timely delivery of appropriate, quality health care to its beneficiaries—approximately 45 million aged, disabled, and poor Americans. HCFA is committed to making beneficiaries aware of the services for which they are eligible, promoting the accessibility of those services and ensuring that HCFA policies and actions promote efficiency and quality within the total health care delivery system.

HCFA's Office of Research, Demonstrations, and Statistics (ORDS) conducts studies and projects that demonstrate and evaluate optional reimbursement, coverage, eligibility, and management alternatives to the present Federal programs. ORDS also assesses the impact of HCFA programs on health care costs, program expenditures, beneficiary access to services, health care providers, and the health care industry. In addition, ORDS monitors national health care expenditures and prices and provides actuarial analyses on the costs of current HCFA programs as well as the impact of possible legislative or administrative changes in the programs.

The purpose of the ***Health Care Financing Notes*** is to provide the public with descriptive program data or information as soon as it becomes available. Data is presented here in a brief, concise format. Frequently a more comprehensive analysis of the data may be available at a later time in one of the Health Care Financing Administration's other publications.

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Medicare: Use of Long-Stay Hospitals, 1977

This *Note* presents for the first time preliminary estimates on the use and amounts reimbursed for Hospital Insurance (HI) beneficiaries discharged from participating long-stay hospitals under Medicare during 1977.¹ Longitudinal data on the amounts reimbursed for inpatient services in long-stay hospitals under Medicare are shown for the years 1969-77. The data are also shown by type of hospital, type of entitlement, and State of residence. The long-stay hospital data in this *Note* are shown in relation to total Medicare inpatient hospital utilization.

Since July 1, 1966, the Medicare HI program has been paying a large proportion of the costs of inpatient hospital care provided to persons aged 65 and over entitled to those benefits. Effective July 1, 1973, the same HI benefits were extended to persons under 65 years of age who were entitled to cash benefits for not less than 24 consecutive months under the disability insurance program and to persons with end-stage renal disease (ESRD).

Highlights of the data follow:

Reimbursement Trends, 1969-77

- Between 1969 and 1977 expenditures for long-stay hospital care increased from an estimated \$77.4 million to \$258.2 million—an average annual rate of increase of about 16.3 percent.
- During this same period, long-stay hospital expenditures as a percent of total Medicare inpatient hospital expenditures ranged from 1.7 to 2.0 percent (Table 1).

Utilization and Reimbursement, 1977

- The estimated 114,930 discharges from long-stay hospitals in 1977 accounted for approximately 2.8 million covered days of care, an average of 24.7 days per discharge. The covered length of stay for long-stay hospital discharges was about two weeks longer than for short-stay hospital discharges (10.6 days) (Table 2).
- In relation to total Medicare inpatient hospital utilization and reimbursements, discharges from long-stay hospitals accounted for approximately 1.3 percent of all discharges, 3.0 percent of the total covered days of care, and 1.7 percent of reimbursements.

Prepared by Charles Helbing, Office of Research, Demonstrations, and Statistics, Health Care Financing Administration. Statistical services were provided by Kathryn Barrett. Computer software services were prepared by Vikki Latta and Berry Gunn.

¹For a detailed report of the conditions of participation for long-stay hospitals under Medicare, see "Regulations No. 5, Federal Health Insurance for the Aged", Title 20, Chapter III, Part 405, HCFA.

- Medicare reimbursement for long-stay hospital care averaged \$1,986 per discharge and \$80 per covered day; the corresponding averages for all short-stay hospital discharges were \$1,557 and \$147, respectively.

Type of Entitlement and Type of Hospital, 1977

- Approximately 35 percent of all discharges from long-stay hospitals were disability beneficiaries. In contrast, about 11 percent of all short-stay hospital discharges were disability beneficiaries.
- About 56 percent of all long-stay hospital discharges were from psychiatric hospitals. For the disabled, almost 80 percent of all long-stay discharges were from psychiatric hospitals. And 43 percent of all aged long-stay discharges were from psychiatric hospitals.
- Covered days of care per discharge for aged beneficiaries (25.3 days) was nearly 2 days longer than for disabled beneficiaries (23.6 days). This pattern held for both psychiatric and all other long-stay hospitals (Table 2).
- The mean reimbursement per discharge for aged long-stay hospital beneficiaries (\$2,200) was over \$600 higher than that for disabled beneficiaries (\$1,593). The mean reimbursement per discharge for all other long-stay hospitals (\$2,618) was over \$1,100 higher than that for discharges from psychiatric hospitals (\$1,487).

State of Residence, 1977

- Use of long-stay hospital care varied considerably by State of residence. In Idaho, there were no long-stay hospitals participating in the Medicare program. In contrast, California and New York recorded nearly 23 percent of all discharges from long-stay hospitals (Table 3).
- For long-stay hospitals, covered days of care per discharge ranged from a low of 16.1 days in Maine to a high of 38.3 days in the District of Columbia.
- Maryland had the highest ratio of long-stay hospital to total inpatient hospital use and reimbursement. In Maryland, 4.3 percent of all inpatient hospital discharges were from long-stay hospitals, accounting for 8.4 percent of all inpatient hospital covered days of care and 4.4 percent of all inpatient hospital reimbursement.
- The average reimbursement per long-stay hospital discharge ranged from a low of \$662 in South Carolina to a high of \$3,456 in Mississippi. Similarly, these States registered the lowest (\$21) and highest (\$149) mean reimbursement per covered day of care.

Sources and Limitations of Data

Data published in this *Note* were derived from billing forms for inpatient services submitted for payment by long-stay hospitals for a 20-percent sample of HI beneficiaries. They covered all discharges, including death during hospitalization.

Three key limitations must be considered when analyzing the data shown in this report: (1) sampling variability, (2) exclusions, and (3) bill-processing time lag. First, since the figures shown are derived from a 20-percent sample of HI beneficiaries, they are subject to sampling variability. Second, excluded from the file used to prepare this report were those hospital bill records without a discharge indicator and those long-stay hospital discharge records without at least one covered day of care. Last, and perhaps most important, is the incompleteness of the 1977 file resulting from the lag between the time when a bill is submitted for payment and when it is posted to the Medicare central records.

Reimbursement data shown in Table 1 represent bills processed through December 1978 and recorded in HCFA tabulations. As a result, the amounts recorded in recent years are not as complete as those for earlier years. For all inpatient hospital services, amounts shown for calendar years 1969-75 represent a "complete" tabulation (close to 100 percent) of expenditures. To estimate amounts reimbursed for inpatient services in 1976 and 1977 and to permit year to year comparisons the amounts recorded in the tabulations of December 1978 were inflated by 1 percent and 2 percent, respectively. For long-stay hospital services, there is a longer lag in the submission and processing of bills. As a result, inflation factors ranging from 1 percent in 1973 to 10 percent in 1977 were applied.

Utilization and reimbursement data for 1977 shown in Tables 2 and 3 are based on discharged records processed through June 1978. Discharges recorded after that date were not included.

Discharge records, which represent the history of the person's hospital stay, are prepared for a 20-percent sample of HI beneficiaries discharged from inpatient hospitals. The sample counts are multiplied by 5 to estimate national totals. To prepare discharge records, information from the billing form is matched to the master "Health Insurance Eligibility" file, which contains information on the beneficiaries' demographic characteristics, including State of residence. This record is then matched to the Provider of Services master file which contains information on the characteristics of each participating hospital.

The discharges, covered days, and amounts reimbursed shown in Tables 2 and 3 are not inflated to reflect processing lags. For this reason, the total reimbursement report in Table 1 differs from that shown in Tables 2 and 3. The purpose of these tables is to show the relationship of long-stay hospital use to all inpatient hospital use (Table 2). The distribution among the States is shown in Table 3. It is estimated that slightly more than 10 percent of the long-stay hospital discharges and 4 percent of the short-stay hospital discharges for 1977 were not recorded by June 1978.

Estimates for individual states differ significantly from this. However, missing data should not significantly affect the averages and distributions within the States.

The data shown in this *Note* include the 50 States, the District of Columbia, and Puerto Rico.

Definitions

Covered day of care—A day of inpatient hospital care during which the services (determined to be medically necessary by the Professional Standards Review Organization or the Utilization Review Committee) covered by Medicare were furnished to a person eligible for HI benefits. The day of discharge is not counted as a day of care.

Discharge—The formal release of a patient from a hospital. Discharges include persons who died during their hospitalization or were transferred to another hospital.

Reimbursement—Payments under the HI program which are shown in this *Note* are based on interim reimbursement rates reported on processed bills. The interim rates are established to reflect current costs as closely as possible. These are usually established as a per diem amount or as a percentage of total charges. Figures shown exclude amounts for which the patient is responsible such as deductibles, coinsurance, and charges for noncovered services. The final amount of reimbursement due under Medicare to each provider of medical services is determined after the end of the fiscal year on the basis of the providers audited reasonable cost of operations.

Short-stay hospitals—Those hospitals where the average length of stay is less than 30 days.

State—Refers to the State where the beneficiary is living, not the State where he or she receives services.

TABLE 1.—Total Medicare inpatient hospital reimbursement and long-stay hospital reimbursement, 1969-77¹

Calendar year	Total inpatient hospital reimbursement ²		Long-stay hospital reimbursement ³		
	Amount (in millions)	Percent change	Amount (in millions)	Percent change	Percent of total inpatient hospital reimbursement
1969	\$4,178.2	—	\$77.4	—	1.9
1970	4,656.3	11.5	83.7	10.8	1.8
1971	5,250.5	12.8	90.0	16.3	1.7
1972	5,776.1	10.0	98.6	9.6	1.7
1973	6,801.1	17.7	132.1	34.0	1.9
1974	8,238.6	21.1	165.0	24.9	2.0
1975	10,181.4	23.6	190.3	15.3	1.9
1976	12,485.5	21.4	212.9	11.9	1.7
1977	14,337.8	16.0	258.2	21.3	1.8

¹ Amounts based on bill records processed through December 1978 and recorded in HCFA utilization tabulations.

² Estimates for 1976 and 1977 are derived from "inflating" amounts recorded through December 1978 to adjust for lags in submission and processing of bills. See Sources and Limitations of Data.

³ Estimates for 1973 through 1977 are derived from "inflating" amounts recorded through December 1978 to adjust for lags in submission and processing of bills. See Sources and Limitations of Data.

TABLE 2.—Number of discharges, covered days of care, and amount reimbursed, by type of hospital and type of entitlement, 1977¹

Type of entitlement and type of hospital	Discharges		Covered days		Reimbursement				Per day
	Total	Percent of total	Total (in thousands)	Percent of total	Per discharge	Amount (in thousands)	Percent of total	Per discharge	
All inpatient hospital	8,701,050	100.0	93,822.0	100.0	10.8	\$13,598,283.9	100.0	\$1,563	\$145
Short-stay	8,586,120	98.7	90,983.2	97.0	10.6	13,370,029.9	98.3	1,557	147
Long-stay ²	114,930	1.3	2,838.8	3.0	24.7	228,254.0	1.7	1,986	80
Psychiatric	64,205	0.7	1,610.0	1.7	25.1	95,474.5	0.7	1,487	59
All other	50,725	0.6	1,228.8	1.3	24.2	132,779.5	1.0	2,618	108
Aged	7,731,230	88.9	83,714.3	89.2	10.8	12,103,828.6	89.0	1,566	145
Short-stay	7,656,850	88.0	81,832.0	87.2	10.7	11,940,162.3	87.8	1,559	146
Long-stay	74,380	0.9	1,882.3	2.0	25.3	163,666.3	1.2	2,200	87
Psychiatric	32,000	0.4	838.4	0.9	26.2	52,664.6	0.4	1,646	63
All other	42,380	0.5	1,043.9	1.1	24.6	111,001.7	0.8	2,619	106
Disabled	969,820	11.1	10,107.7	10.8	10.4	1,494,455.3	11.0	1,541	148
Short-stay	929,270	10.7	9,151.2	9.8	9.9	1,429,867.6	10.5	1,539	156
Long-stay	40,550	0.4	956.5	1.0	23.6	64,587.7	0.5	1,593	68
Psychiatric	32,205	0.3	771.6	0.8	24.0	42,809.9	0.3	1,329	55
All other	8,345	0.1	184.9	0.2	22.2	21,777.8	0.2	2,610	118

¹ Based on discharge records processed through June 1978 and included in the file used to prepare this report. See Sources and Limitations of Data.

² Excludes discharges with zero covered days of care.

TABLE 3. Number of outcharges, covered days of care, and amounts reimbursed for participating Medicare hospitals, by State, 1977¹

	Discharges			Covered days of care (in thousands)			Average length of covered stay per discharge		Reimbursement				
	All participating hospitals	Long-stay hospitals		All participating hospitals	Long-stay hospitals		All participating hospitals	Long-stay hospitals	All participating hospitals			Long-stay hospitals	
		Number	Percent of all discharges		Number (in thousands)	Percent of total covered days of care			Amount (in thousands)	Per discharge	Per day	Percent of total reim- bursement	Per day
United States ²	8,701,050	114,930	1.3	93,822.0	28,388	3.0	10.8	24.7	\$13,598,283.9	\$1,563	\$145	1.7	\$1,986
Alabama	172,135	1,175	0.7	1,855.7	26.1	1.6	9.7	22.2	187,929.5	1,092	113	1.0	1,589
Alaska	2,782	35	1.3	2.8	0.7	3.2	7.8	18.7	5,569.4	2,002	255	1.4	2,286
Arizona	88,592	550	0.6	863.3	14.0	1.6	9.7	25.5	135,967.4	1,535	197	0.6	1,590
Arkansas	135,458	1,375	1.0	1,188.5	28.1	2.4	8.8	20.4	115,868.3	855	97	1.6	1,310
California	738,615	13,390	1.8	6,687.3	271.1	4.0	9.1	20.2	1,482,988.9	2,008	222	2.1	2,304
Colorado	96,079	1,750	1.8	928.9	42.0	4.5	9.7	24.0	134,284.8	1,393	145	2.6	2,028
Connecticut	102,123	3,160	3.1	1,199.3	72.7	6.1	11.7	23.0	207,834.2	2,035	173	2.7	1,779
Delaware	17,059	620	3.6	213.0	16.8	7.9	12.5	27.0	31,155.6	1,822	146	3.4	1,698
District of Columbia	25,734	410	1.6	356.8	15.7	4.4	13.9	38.3	67,125.6	2,008	188	1.7	2,794
Florida	516,292	4,035	0.8	5,094.8	104.5	2.1	9.9	25.9	781,895.2	1,514	153	0.9	1,702
Georgia	198,849	2,305	1.2	1,762.9	41.1	2.3	8.9	17.8	217,573.7	1,094	123	1.2	1,127
Hawaii	19,107	380	2.0	145.6	11.6	8.0	7.6	30.5	26,133.6	1,368	179	4.3	2,936
Idaho	30,958	243.2	0.8	243.2	2.7	1.1	7.8	22.2	34,886.6	1,127	143	1.4	2,527
Illinois	431,280	4,355	1.0	5,056.5	96.7	1.9	11.7	22.2	778,794.1	1,806	154	1.4	2,527
Indiana	204,566	540	0.3	2,266.7	13.4	0.6	11.1	24.7	300,049.0	1,467	132	0.3	1,685
Iowa	151,121	455	0.3	1,438.0	11.3	0.8	9.5	24.8	187,677.5	1,242	131	0.3	1,039
Kansas	118,445	715	0.6	1,171.4	20.9	1.8	9.9	29.1	141,857.4	1,198	121	1.1	1,445
Kentucky	158,862	1,575	1.0	1,594.3	42.0	2.6	10.0	26.6	172,977.9	1,088	108	1.5	1,600
Louisiana	156,688	1,415	0.9	1,493.6	41.1	2.8	9.5	29.0	164,550.1	1,050	110	1.1	1,232
Maine	50,375	165	0.3	497.0	2.7	0.5	9.9	16.1	77,287.4	1,534	156	0.2	872
Maryland	106,086	4,570	4.3	1,408.5	117.9	8.4	13.3	25.8	229,217.0	2,161	163	4.4	2,221
Massachusetts	240,966	4,385	1.8	3,025.0	108.8	3.6	12.6	24.8	520,213.2	2,159	172	1.8	2,085
Michigan	303,084	3,280	1.1	3,534.0	83.3	2.4	11.7	25.4	590,845.9	1,949	167	1.4	2,557
Minnesota	191,489	1,100	0.6	1,915.0	34.3	1.8	10.0	31.1	279,451.5	1,459	146	0.7	1,677
Mississippi	129,232	185	0.1	1,262.8	4.3	0.3	9.8	23.5	117,997.0	913	93	0.5	3,456
Missouri	246,648	4,250	1.7	2,773.2	93.9	3.4	11.2	22.1	345,227.4	1,400	124	1.7	1,363
Montana	35,089	65	0.2	277.7	1.6	0.6	7.9	25.1	36,304.5	1,035	131	0.4	1,971
Nebraska	84,630	530	0.6	819.0	12.3	1.5	9.7	23.1	98,208.0	1,160	120	0.9	1,651
Nevada	20,976	145	0.7	184.3	2.9	1.6	8.8	20.2	34,893.7	1,664	189	0.6	1,433
New Hampshire	34,515	250	0.7	347.4	6.9	2.0	10.1	27.6	47,130.3	1,366	136	0.8	1,415
New Jersey	250,314	4,315	1.7	3,385.5	114.0	3.4	13.5	26.4	453,501.5	1,812	134	2.0	2,051
New Mexico	34,428	195	0.6	295.0	4.3	1.5	8.6	22.3	44,239.3	1,285	150	0.9	1,951
New York	629,776	12,705	2.0	9,064.7	364.7	4.0	14.4	28.7	1,385,548.9	2,200	153	2.6	2,801
North Carolina	209,076	7,350	3.5	2,386.1	188.9	7.9	11.4	25.7	247,661.7	1,185	104	4.1	1,393
North Dakota	39,440	630	1.6	364.4	14.6	4.0	9.2	23.2	49,293.0	1,250	135	2.1	1,673
Ohio	396,980	4,605	1.2	4,745.1	130.4	2.7	12.0	28.3	647,699.2	1,632	136	1.4	1,977
Oklahoma	141,125	1,385	1.0	1,271.7	30.5	2.4	9.0	22.0	170,140.9	1,206	134	0.8	965
Oregon	85,804	860	0.9	793.2	20.8	3.4	8.3	31.4	148,547.8	1,551	187	0.9	1,511
Pennsylvania	488,232	7,485	1.5	6,003.7	208.8	3.5	12.3	27.9	803,477.3	1,645	134	2.5	2,644
Rhode Island	34,884	650	1.9	404.1	13.3	3.3	11.6	20.5	67,161.4	1,925	166	1.6	1,606
South Carolina	91,551	1,150	1.3	939.1	35.4	3.8	10.3	30.8	103,026.8	1,125	110	0.7	662
South Dakota	38,633	165	0.4	346.8	4.1	0.9	9.0	18.6	41,834.4	1,083	121	0.4	959
Tennessee	217,499	1,670	0.8	2,182.2	36.2	1.7	10.0	21.7	233,901.0	1,075	107	0.9	1,239
Texas	520,657	8,200	1.6	4,967.7	162.4	3.3	9.5	19.8	632,582.1	1,215	127	2.2	1,732
Utah	30,697	120	0.4	244.9	3.9	1.6	8.0	32.3	38,700.6	1,261	158	0.5	1,582
Vermont	21,823	140	0.6	230.0	5.2	2.3	10.5	36.6	29,019.4	1,330	126	0.6	1,332
Virginia	165,650	1,855	1.1	1,312.4	56.8	3.0	11.5	30.6	215,449.0	1,301	113	1.4	1,598
Washington	135,331	1,095	0.8	1,146.2	28.9	2.5	8.5	26.4	228,496.2	1,688	199	0.6	1,338
West Virginia	96,805	570	0.6	1,071.3	11.0	1.0	11.1	19.3	139,301.4	1,439	130	0.4	966
Wisconsin	186,871	1,865	1.0	1,940.0	41.0	2.1	10.4	22.0	312,846.2	1,674	161	1.1	1,764
Wyoming	12,859	105	0.8	116.4	2.1	1.8	9.1	20.3	18,106.1	1,408	156	0.8	1,451
Puerto Rico	54,580	650	1.2	575.9	17.6	3.1	10.6	27.1	35,855.0	657	62	2.2	1,231

¹ Based on discharge records processed through June 1978 and included in the file used to prepare this report. See the section "Source and Limitations of the Data".² Includes Puerto Rico.

Health Care Financing Notes

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